

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jiawei Huang on 3 June 2008.

2. The application has been amended as follows:

Please amend claim 1 as follows:

1. A double waveform method for driving a transmission line originally at an initial voltage on the transmission line to a final voltage, the double waveform method comprising:

finding a first voltage, a second voltage, a first voltage maintenance period and a second voltage maintenance period according to the initial voltage and the final voltage;

applying putting up the first voltage on the transmission line for a time period equal to the first voltage maintenance period; and

applying the second voltage on the transmission line for a time period equal to the second voltage maintenance period; and

applying the final voltage on the transmission line<sub>1</sub>

wherein if the final voltage is higher than the initial voltage, the first voltage is configured to be higher than the final voltage and the second voltage is lower than the final voltage, and if the final voltage is lower than the initial voltage, the first voltage is configured to be lower than the final voltage and the second voltage is higher than the final voltage.

Please amend claim 2 as follows:

2. (Cancelled)

Please amend claim 8 as follows:

8. A double waveform method for driving a signal through a transmission line comprising:

putting a first voltage on the transmission line for a first period of time;

putting a second voltage on the transmission line for a second period of time,

wherein the first period of time and the second period of time are configured according to an initial voltage of the signal and a final voltage which is desired to be obtained on the transmission line; and putting a final voltage on the transmission line<sub>1</sub>

wherein if the final voltage is higher than the initial voltage, the first voltage is configured to be higher than the final voltage and the second voltage is lower than the

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final voltage, and if the final voltage is lower than the initial voltage, the first voltage is configured to be lower than the final voltage and the second voltage is higher than the final voltage.

Please amend claim 9 as follows:

9. (Cancelled)

***Allowable Subject Matter***

3. Claims 1, 4-8, 11-14 and 22-23 are allowed.

4. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claims 1 and 8 is the inclusion of the limitations reciting the relative values of the first and second voltages depending upon the value of the final voltage relative to the initial voltage in combination with the other recited features of the claims, which are not found singularly or in combination within the prior art.

The Koshoubo et al. reference teaches in Figure 3A of a gate line waveform in which there is a initial, first, second and final voltage applied for set periods of time, where the first and second voltages are not found dependent upon the final voltage and

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furthermore the final voltage is shown as higher than the first voltage while the first voltage is lower than the initial voltage and the second voltage is higher than the first voltage, which is contrary to the claimed limitations. The Scheffer et al. reference teaches in Figure 3A of a first voltage and a second voltage in which the time periods vary, however, they do not vary dependent upon an initial and final voltages nor are the voltages found based upon the initial and final voltages. Furthermore, even in combination, Scheffer would not modify the pulse amplitudes of the gate signals taught by Koshoubo et al. to teach "wherein if the final voltage is higher than the initial voltage, the first voltage is configured to be higher than the final voltage and the second voltage is lower than the final voltage, and if the final voltage is lower than the initial voltage, the first voltage is configured to be lower than the final voltage and the second voltage is higher than the final voltage" because Koshoubo et al. teaches away from this.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN G. SHERMAN whose telephone number is (571)272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen G Sherman/  
Examiner, Art Unit 2629

/Amr Awad/  
Supervisory Patent Examiner, Art Unit 2629

4 June 2008